Mr. Lawrence Burkhardt III Executive Vice President, Nuclear Operations Niagara Mohawk Power Corporation 301 Plainfield Road Syracuse, New York 13212

Dear Mr. Burkhardt:

SUBJECT: ISSUANCE OF AMENDMENT (TAC NO. 69204)

The Commission has issued the enclosed Amendment No. 110 to Facility Operating License No. DPR-63 for the Nine Mile Point Nuclear Station Unit No. 1 (NMP-1). The amendment consists of changes to the Technical Specifications in response to your application transmitted by letter dated August 25, 1987.

This amendment revises Technical Specification Table 3.2.7. The proposed amendment will (1) increase the maximum operating (closure) time of the Emergency Cooling System high point vent isolation valves to 10 seconds, (2) add the Emergency Cooling System drain line vent isolation valves with a maximum operating (closure) time of 10 seconds, (3) designate more accurately the motive power of the isolation valves.

A copy of the related Safety Evaluation is enclosed. A Notice of Issuance will be included in the Commission's next regular bi-weekly Federal Register notice.

Sincerely,

Original signed by

Marylee M. Slosson, Project Manager Project Directorate I-1 Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 110 to DPR-63

Safety Evaluation

cc: w/enclosures
See next page

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[NMP-1 AMEND 69204] \*SEE PREVIOUS CONCURRENCE

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SPLB \*CMcCracken 09/10/89 OGC \*

09/13/89

D:PDI-1 RCapra 09/04/89

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#### Docket No. 50-220

Mr. Lawrence Burkhardt III Executive Vice President, Nuclear Operations Niagara Mohawk Power Corporation 301 Plainfield Road Syracuse, New York 13212

Dear Mr. Burkhardt:

SUBJECT: ISSUANCE OF AMENDMENT (TAC NO. 69204)

The Commission has issued the enclosed Amendment No. to Facility Operating License No. DPR-63 for the Nine Mile Point Nuclear Station Unit No. 1 (NMP-1). The amendment consists of changes to the Technical Specifications in response to your application transmitted by letter dated August 25, 1987.

This amendment revises Technical Specification Table 3.2.7. The proposed amendment would (1) increase the maximum operating (closure) time of the Emergency Cooling System high power vessel and main steam warmup isolation valves to 10 seconds, (2) add the Emergency Cooling System drain line vent isolation valves with a maximum operating (closure) time of 10 seconds, (3) revise the motive power of the isolation valves.

A copy of the related Safety Evaluation is enclosed. A Notice of Issuance will be included in the Commission's next regular bi-weekly Federal Register notice.

Sincerely,

Marylee M. Slosson, Project Manager Project Directorate I-1 Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation

#### Enclosures:

1. Amendment No. /to DPR-63

2. Safety Evaluation

cc: w/enclosures
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R. Capra	T. Meek(4)	C. McCracken

D. Oudinot

[NMP-1 AMEND 69204]

J. Y Lee

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J. Wiggins

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## UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D. C. 20555

October 4, 1989

Docket No. 50-220

Mr. Lawrence Burkhardt III Executive Vice President, Nuclear Operations Niagara Mohawk Power Corporation 301 Plainfield Road Syracuse, New York 13212

Dear Mr. Burkhardt:

SUBJECT: ISSUANCE OF AMENDMENT (TAC NO. 69204)

The Commission has issued the enclosed Amendment No. 110 to Facility Operating License No. DPR-63 for the Nine Mile Point Nuclear Station Unit No. 1 (NMP-1). The amendment consists of changes to the Technical Specifications in response to your application transmitted by letter dated August 25, 1987.

This amendment revises Technical Specification Table 3.2.7. The proposed amendment will (1) increase the maximum operating (closure) time of the Emergency Cooling System high point vent isolation valves to 10 seconds, (2) add the Emergency Cooling System drain line vent isolation valves with a maximum operating (closure) time of 10 seconds, (3) designate more accurately the motive power of the isolation valves.

A copy of the related Safety Evaluation is enclosed. A Notice of Issuance will be included in the Commission's next regular bi-weekly Federal Register notice.

Sincerely.

Marylic M. Slosson, Project Manager

Project Directorate I-1

Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation

Enclosures:

Amendment No.<sub>110</sub> to DPR-63

2. Safety Evaluation

cc: w/enclosures
See next page

Mr. Lawrence Burkhardt III Niagara Mohawk Power Corporation

cc:

Mr. Troy B. Conner, Jr., Esquire Conner & Wetterhahn Suite 1050 1747 Pennsylvania Avenue, N. W. Washington, D. C. 20006

Mr. Frank R. Church, Supervisor Town of Scriba R. D. #2 Oswego, New York 13126

Mr. James L. Willis General Supt.-Nuclear Generation Niagara Mohawk Power Corporation Nine Mile Point Nuclear Station Post Office Box 32 Lycoming, New York 13093

Resident Inspector
U. S. Nuclear Regulatory Commission
Post Office Box 126
Lycoming, New York 13093

Mr. Gary D. Wilson, Esquire Niagara Mohawk Power Corporation 300 Erie Boulevard West Syracuse, New York 13202

Regional Administrator, Region I U. S. Nuclear Regulatory Commission 475 Allendale Road King of Prussia, Pennsylvania 19406

Ms. Donna Ross New York State Energy Office 2 Empire State Plaza 16th Floor Albany, New York 12223 Nine Mile Point Nuclear Station, Unit No. 1

Mr. Kim A. Dahlberg Unit 1 Station Superintendent Nine Mile Point Nuclear Station Post Office Box 32 Lycoming, New York 13093

Mr. Peter E. Francisco, Licensing Niagara Mohawk Power Corporation 301 Plainfield Road Syracuse, New York 13212

Charlie Donaldson, Esquire Assistant Attorney General New York Department of Law 120 Broadway New York, New York 10271

Mr. Paul D. Eddy
New York State Public Service
Commission
9th Floor
3 Empire State Plaza
Albany, New York 12223



# UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

#### NIAGARA MOHAWK POWER CORPORATION

DOCKET NO. 50-220

#### NINE MILE POINT NUCLEAR STATION, UNIT 1

#### AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 110 License No. DPR-63

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Niagara Mohawk Power Corporation (the licensee) dated August 25, 1987, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission:
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations:
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
- 2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-63 is hereby amended to read as follows:

### (2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No.  $_{110}$ , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Robert A. Capra, Director Project Directorate I-1

Division of Reactor Projects - I/II

Attachment: Changes to the Technical Specifications

Date of Issuance: October 4, 1989

## ATTACHMENT TO LICENSE AMENDMENT

## AMENDMENT NO. 110 TO FACILITY OPERATING LICENSE NO. DPR-63

### DOCKET NO. 50-220

## Revise Appendix A as follows:

Remove Page	<u>Insert Page</u>
118	118
-	118a

## LIMITING CONDITIONS FOR OPERATION Table 3.2.7

#### REACTOR COOLANT SYSTEM ISOLATION VALVES

Line or System	No. of Valves (Each Line)	Location Relative to Primary Containment	Normal Position	Motive Power	Oper. Time (Sec)	Action on Initiating Signal	Initiating Signal (All Valves Have <u>Remote Manual Backup)</u>
Main Steam (Two Lines)	) 1	Inside Outside	Open Open	AC Motor Pn/DC Solenoid	10 10	Close Close	Reactor water level low-low, or main steam line high radia- tion, or main steam line high
Emergency Cooling Steam Line Drain to Main Steam (Two Lines)	2	Outside	Open	Pn/DC Solenoid	10	Close	flow, or low condenser vacuum, or high temperature in the steam tunnel
Emergency Cooling High Point Vent to Main Steam (One Line)	2	Outside	Open	Pn/DC Solenoid	10	Close	<b>(</b>
<u>Feedwater</u> (Two Lines)	1 1	Outside Outside	Open -	AC Motor Self Act. Ck.	60 	<del>-</del>	Ī
Emergency Cooling							
Steam Leaving Reactor (Two Lines)	1	Outside Outside	Open Open	AC Motor DC Motor	38 38	Close Close	High system flow
(Onden <u>ser Return to Reactor</u> (Two Lines)	1	Inside Outside	_ Closed	Self Act. Ck. Pn/DC Solenoid	 60	- Close .	l

#### NOTES:

(1) Pn - Pneumatically operated.

Amendment No. 60, 96 , 110

## LIMITING CONDITIONS FOR OPERATION Table 3.2.7 (Continued)

### REACTOR COOLANT SYSTEM ISOLATION VALVES

Line or System	No. of Valves (Each Line)	Location Relative to Primary Containment	Normal Position	Motive Power	Oper. Time (Sec)	Action on Initiating Signal	Initiating Signal (All Valves Have Remote Manual Backup)
Reactor Cleanup							
Water Leaving Reactor (One Line)	1	Inside Outside	Open Open	AC Motor . DC Motor	18 18	Close (	Reactor water level low-low, or high area
<u>Water Return to Reactor</u> (One Line)	1	Inside Outside	Open -	AC Motor Self Act. Ck.	18	Close }	temperature, liquid poison initiation or high system pressure, or low system flow, or high system temperature
Shutdown Cooling						'	`
<u>Mater Leaving Reactor</u> (One Line)	1	Inside Outside	Closed Closed	AC Motor DC Motor	40 40	Close (	Reactor water level
<u>Water Return to Reactor</u> (One Line)	1	Inside Outside	Closed -	AC Motor Self Act. Ck.	40 	Close	low-low, or high area temperature

Amendment No. 110,



# UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

#### RELATED TO AMENDMENT NO. 110 TO FACILITY OPERATING LICENSE NO. DPR-63

#### NIAGARA MOHAWK POWER CORPORATION

#### NINE MILE POINT NUCLEAR STATION, UNIT NO. 1

DOCKET NO. 50-220

#### INTRODUCTION

By letter dated August 25, 1987, Niagara Mohawk Power Corporation (the licensee) has requested a change to Technical Specification Table 3.2.7. The requested change would increase the maximum operating (closure) time for the Emergency Cooling System high point vent isolation valves from 5 to 10 seconds. In addition, the emergency cooling drain line vent isolation valves would be added to Table 3.2.7. A closure time of 10 seconds is specified for these valves to be consistent with the closure time of the valves identified above. In addition, Table 3.2.7 would be revised to designate more accurately the motive power of the isolation valves.

The licensee had also requested in the August 25, 1987 letter that the maximum operating (closure) time for the main steam warmup isolation valves be increased from 8 to 10 seconds. Subsequent to this request the main steam warmup valves were deleted through license Amendment No. 96 dated March 25, 1988. Therefore, there is no need to address the maximum operating (closure) time for the main steam warmup isolation valves.

The NRC staff's evaluation of the licensee's request is as follows.

#### **EVALUATION**

The function of the Emergency Cooling System high point vent and drain line vent isolation valves is to assure that reactor coolant loss and when applicable offsite radiological release are minimized in the event of a main steam line (MSL) rupture outside of containment.

The high point vent isolation valves are located on the vent header to the main steam line. At the high point in the steam supply line to each of the four emergency condensers a vent is provided for purging non-condensible gas from the system. These four individual vent lines are paired to connect to two common vent lines. The two common vent lines then connect again. The connection then separates into two different vent paths. One vent path discharges to the torus and is normally closed. The other vent path discharges continuously to the main steam line beyond the main steam outside isolation valves. This line

8910190285 891004 PDR ADOCK 05000220 P PDC contains two isolation valves (05-02R and 05-03R) for which the licensee has requested a maximum closure time change from 5 to 10 seconds to be consistent with the main steam line isolation valves closure time. Following a MSL break outside containment, the total time for MSL isolation is 11 seconds based on the valve closure Technical Specification limit of 10 seconds plus 1 second for valve actuation. The total reactor coolant loss through the ruptured 24" diameter steam line is estimated at 101,000 lbs during the MSL isolation valve closure. We find the reactor coolant loss through the high point vent isolation valves insignificant compared to the reactor coolant loss through the ruptured MSL. Similarly, we find the offsite radiological consequences due to the increase of the vent isolation valve closure time to be negligible (less than a dose of 0.1 rem to the thyroid) compared to that due to the main steam line rupture (10 rem to the thyroid). The Standard Review Plan Section 15.6.4 specifies a dose limit of 30 rem to the thyroid due to the main steam line failure outside containment.

The licensee's request to increase the maximum operating (closure) time for the emergency cooling system high point vent isolation valves from 5 to 10 seconds is found to be acceptable and it is approved by the staff.

The licensee requested also to add four emergency cooling drain line vent isolation valves (39-11R, 39-12R, 39-13R, 39-14R) with 10 seconds maximum operating (closure) time. These valves had been installed earlier, with the staff approval, to improve the isolation characteristics of the drain line. Their omission from Table 3.2.7 was an editorial oversight. There are two valves in series located on each of the two main steam drain lines. The typical closure time of these valves range between 5.7 and 6.8 seconds. licensee requested a 10 seconds maximum closure time to be consistent with the main steam line isolation valves closure time. In the event of a MSL break outside containment and Main Steam Line Isolation valves closure, we find the reactor coolant loss through the emergency cooling drain line vent isolation valves insignificant compared to the reactor coolant loss through the ruptured MSL. With regard to a potential radiation release, the emergency cooling drain line vent is routed to the main condenser, therefore the valve closure time does not affect the offsite radiological consequences in the event of a MSL rupture.

The licensee's request to add the emergency cooling drain line vent isolation valves with a maximum operating (closure) time of 10 seconds is found to be acceptable and is approved by the staff.

Finally, the licensee's request to change the Motive Power column of Table 3.2.7 is approved by the staff. This does not change the type of power for any valve operator; it merely identifies the power more specifically and involves only editorial changes and is acceptable.

#### ENVIRONMENTAL CONSIDERATION

This amendment involves a change in the installation or use of the facility components located within the restricted areas as defined in 10 CFR 20. The staff has determined that this amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR Sec 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

#### CONCLUSION

We have concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of these amendments will not be inimical to the common defense and security or to the health and safety of the public.

Dated: October 4, 1989

#### PRINCIPAL CONTRIBUTORS:

- J. Lee
- D. Oudinot